



SFFF Project 21156: Transitioning Exotic Forest to Native (2022-2027)

Project Partners Update – October 2024

Kia ora koutou,

There has been a lot going on with the Tāne's Tree Trust Transitioning Exotic Forest to Native project. This is a 5-year research project supported by MPI's Sustainable Food and Fibre Futures fund and our forestry partners. 2022 was focused on setting up the different workstreams and getting field work underway and in 2023 work concentrated on progressing this fieldwork. The different workstreams are:

1. LUCAS analysis - Analyse existing LUCAS data to assess native understory development and forest characteristics within plantation forests to better understand these forests and necessary management to encourage a transition.
2. Bioclimatic surveys - Undertake plot surveys to gain information about bioclimatic effects on native understory characteristics around the country.
3. Tairāwhiti surveys - Undertake targeted plot surveys to determine what management actions are required to support a pine to native forest transition in Tairāwhiti.
4. Transition trials - Establish a nationally relevant network of permanent sample plots to inform carbon and biodiversity forestry models and to empirically refine management practices.
5. Forest modelling - Model the dynamics of transitional forest for a range of contexts and management objectives (e.g., growth, biodiversity/successional change, and carbon profiles).
6. Best-practice guidelines - Produce guidelines to manage transitions from exotic pine to native forest highlighting the key factors to address and interventions necessary. Recommendations for best-practice transitional forestry and monitoring.

Progress in 2024

- The LUCAS data analysis and reporting is led by Dr Mark Kimberley and is almost complete with a peer-reviewed paper is currently being prepared.
- Dr Adam Forbes has surveyed 55 plots across a range of climate zones and is currently assessing this data. The reporting on the national bioclimatic plot surveys will be finalised before the end of the year.

- Meg Graeme is leading the Tairāwhiti pine understory surveys. 45 sites have been surveyed and the data is now being assessed. The report will also be sent out for review shortly.
- Mike Bergin and Meg Graeme are leading the forestry trials. Paired poisoned/unpoisoned canopy plots with and without fencing have been set up in Omahuta Forest (Northland), Whangapoua Forest (Coromandel) and the upper Maitai (Nelson) to date. These are surveyed annually to gather data on understory planting and natural regeneration survival and growth. It is hoped that a suitable trial site can also be established in Tairāwhiti.
- Dr Mark Kimberley is soon to start on the Carbon/Biodiversity modelling utilising all the data collected to date. This will help inform the development of the preliminary best practice management guidelines for transitioning exotic pine forest to native.
- The aim is to have the preliminary guidelines ready for public release in early-mid 2025. These will be updated at the end of the project to include the on-going trial data.

We thank everyone who has assisted Tāne's Tree Trust so far –

<i>Summit Forests</i>	<i>Ngati Porou Forestry</i>	<i>Ernslaw One Ltd</i>
<i>Aratu Forests Ltd</i>	<i>Manulife Forest Management NZ Ltd</i>	<i>Pan Pac Forest Products Ltd</i>
<i>Rayonier Matariki Forests</i>	<i>City Forests</i>	<i>Juken NZ Ltd</i>
<i>Tasman Pine Forests Ltd</i>	<i>Ngai Tahu Forestry</i>	<i>OneFourtyOne</i>
<i>Gisborne District Council</i>	<i>Nelson City Council</i>	<i>Hawke's Bay Regional Council</i>
<i>Northland Department of Conservation</i>	<i>Ministry for Environment</i>	

Please get in touch if you have any feedback or questions about this research programme.

Ngā mihi nui | kind regards
the Tāne's Tree Trust team

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